

NATIONAL TRANSPORTATION SAFETY BOARD  
DEPARTMENT OF TRANSPORTATION  
WASHINGTON, D.C. 20591

AUG 19 1968

A-68-21

Mr. David D. Thomas  
Acting Administrator  
Federal Aviation Administration  
Department of Transportation  
Washington, D. C. 20590

Dear Mr. Thomas:

During a Nassau-Miami flight on July 8, 1968, an Eastern Air Lines Boeing 727, N8124N, experienced a separation of the 13th-stage compressor disk rim in its No. 1 Pratt & Whitney JT8D engine.

Our investigation of this incident disclosed that the failure was precipitated by multiple fatigue fractures of the No. 4 bearing housing assembly, allowing axial shift of the compressor rotor assembly and circumferential rubbing of the compressor disk rim.

The bearing housing involved was an early design configuration which has a history of service difficulties. However, to our knowledge, none of these service difficulties resulted in a major failure such as experienced in this case.

Several greatly improved configurations of bearing housings with more satisfactory service histories have been released for service by the manufacturer during the past several years.

To preclude the possibility of a recurrence of such an incident, it is recommended that regulatory action be initiated to provide for expedited retrofit of affected Pratt & Whitney JT8D engines, preferably with the latest bearing housing assemblies outlined in Pratt & Whitney JT8D Service Bulletin #1716.

It is further recommended, as an interim measure, that an appropriate maintenance alert bulletin be issued calling this matter to the immediate attention of concerned operators and stressing the critical nature of appropriate and timely inspections.

REPLY

Mr. David D. Thomas (2)

This subject has been discussed with members of your EA-210 engineering staff by investigators of our Central Investigation Division.

Please do not hesitate to contact us if further information is desired.

Sincerely yours,

Original signed by

Joseph J. O'Connell, Jr.

Joseph J. O'Connell, Jr.  
Chairman